

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 6555 **TITLE:** INDUSTRIAL ELECTRICIAN II **GRADE:** S-19

DEFINITION:

Under general supervision, performs journeyman electrical work associated with the installation, modification, maintenance, and repair of industrial electrical systems, controls, and equipment; and performs related work as required.

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

The Industrial Electrician II class is distinguished from the Industrial Electrician I class in that positions assigned to the Industrial Electrician II class are expected to exercise considerable initiative and judgment in performing complex journeyman level tasks and lead the work of Industrial Electrician I's who perform more routine tasks under supervision.

ILLUSTRATIVE DUTIES:

Troubleshoots equipment, control, and power system failures to determine the cause and corrective action required;

Makes necessary repairs and replacements, and tests effectiveness of corrective action;

Installs, extends, and replaces circuits, controls, motors and other electrical equipment in accordance with electrical code and safety guidelines;

Troubleshoots most complex electrical problems on motors and pumps up to 1250 HP and generators up to 2500KW;

Installs circuits for power, lighting and equipment using all types of wiring methods (i.e. rigid metal conduits up to 4" and conductors up to 500MCM.);

Troubleshoots/repairs main and branch circuit breakers, etc;

Installs Variable Frequency Drives up to 500 Hp, UPS's

Diagnoses and troubleshoots live electrical circuits where a blue print or schematic may not be available;

Makes own schematics and add them to the plant online O&M manuals;

Diagnoses problems and repairs/replaces failed lighting systems and controls as well as electromagnetic and electronic ballast's on lighting equipment;

Operates assigned service vehicle, maintains inventory of spare parts and initiates procurement of replacement supplies and equipment as necessary;

Collects data for preventive maintenance system and maintains activity logs;

Responds to routine and emergency service calls after normal working hours;

Follows and enforces safety regulations and procedures;

May serve as a team leader to Industrial Electrician I's providing guidance/direction and instruction, appraising performance, serving on selection panels and inspecting/approving the work performed by team members.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Thorough knowledge of the standards, practices and equipment of the electrical trade;
Thorough knowledge of applicable county, state and national electrical, NFPA and safety codes;

Knowledge of safety regulations and procedures as well as common hazards associated with working with electricity;

Ability to plan and perform work of the trade at the journeyman-level;

Ability to work from tall ladders or aerial lifts up to 65 feet;

Ability to follow written and oral instructions as well as diagrams, schematics, blue prints and manufacturer's manuals;

Ability to work in under ground manholes on electrical feeders;.

Considerable knowledge of electrical controls and motors, including high voltage three-phase service;

Ability to troubleshoot and repair industrial type electrical systems and equipment;

Ability to estimate time and material needs;

Ability to maintain good interpersonal relationships;

Ability to train/instruct and provide guidance/direction to Industrial Electrician I's;

Ability to perform duties in inclement weather, in the presence of hazardous chemicals and routinely work in dark, hot, cold or damp working environments in tiring, physically demanding positions for long periods of time.

Ability to work in conditions that include climbing ladders and scaffolding, and descending underground, as well as exposure to hazardous chemicals, infectious bacteria, and the hazards of high voltage electrical shock.

EMPLOYMENT STANDARDS:

Any combination of education and experience equivalent to completion high school graduation or a G.E.D issued by a state department of education; AND;

Successful completion of an approved electrician's apprentice program;

PLUS;

Two years of experience as an entry level electrician at the level of Industrial Electrician I or equivalent experience.

NECESSARY SPECIAL REQUIREMENTS:

Adequate color perception to distinguish colors of electrical wiring.

CERTIFICATES AND LICENSES REQUIRED:

Possession of a valid state motor vehicle operator license.

Possession of a valid Commonwealth of Virginia journeyman electrician's license.

Possession of a valid state motor vehicle operator license.

REVISED: August 31, 2006

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ESTABLISHED: December 7, 1987